



CAIT

Center for Advanced Infrastructure & Transportation
Rutgers, The State University of New Jersey

QUARTERLY PROGRESS REPORT

Project Title:	Demonstration Project – The Measurement of Pavement Noise Using the NCAT Noise Trailer		
RFP NUMBER:	NJDOT PRINCIPAL Anthony Chmiel		
TASK ORDER NUMBER/Study Number: Task Order No. 140 / 4-2XXXX	PRINCIPAL INVESTIGATOR: Thomas Bennert		
Study Start Date: 07/1/2003 Study End Date: 12/31/2003	Period Covered: 3rd Quarter 2003		

Task	% of Total	% of Task this quarter	% of Task to date	% of Total Complete
1. Pavement Type Selection	10%	100%	100%	10%
2. Pavement Noise Testing	70%	100%	100%	70%
3. Data Analysis and Reporting	20%	0%	0%	0%
Final Report				
TOTAL	100%			80%

1. Progress this quarter by task:

- A. The pavement noise study began by evaluating what pavement surfaces in New Jersey to be selected for testing. Eventually, 6 Portland Cement Concrete (PCC) and 14 hot mix asphalt (HMA) were selected for evaluation. The PCC surfaces comprised of both old and new, tined, and diamond ground. The HMA surfaces comprised of open-graded friction course, novachip, SMA, and 12.5mm and 19mm Superpave mixes. Some of the open-graded mixes also contained crumb rubber.
- B. The testing finished within two weeks. The testing was conducted to evaluate both the variability of the test measurements (by conducting repeat runs on the same surface at the same area) and also looked at evaluating the effect of traffic speed (the trailer was driven at 60, 65, and 70 mph). The traffic speeds were selected to encompass the typical traffic speeds found on the particular roadways tested. If the speed limit on the roads were only 55 mph, the trailer speed was adjusted to again encompass the speed limit.

2. Proposed activities for next quarter by task:

- A. The analysis of the sound data is currently taken place at the National Center for Asphalt Technology (NCAT) at Auburn University. After speaking with Doug Hansen, who is the lead engineer at NCAT working with the noise trailer, it is anticipated that the analysis should be finished by the beginning of December, with the final report following shortly after. Doug Hansen has also agreed to come to New Jersey to provide a presentation on the findings from the study.

3. List of deliverables provided in this quarter by task (product date)

N.A.

4. Progress on Implementation and Training Activities

N.A.

5. Problems/Proposed Solutions

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N.A.

6. Budget Summary*

Total Project Budget(# of years)	6 Months	\$15,000
Total Project Expenditure to date		\$0
% of Total Project Budget Expended		0%
Task Order Number/Study Number:		
Current Task Order Budget (# of years)	Year 1	\$15,000
Actual Expenditure to date against current task order		\$0
% of current task order budget expended		0%

* These are approximate expended amounts for the project; these estimates are for reference only and should not be used for official accounting purposes. For a more accurate project accounting please review the quarterly invoice for this project.

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